

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

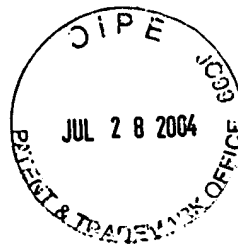
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



ANT1m	ATGGGTGATCAGCTTGGAGTTCTAAAGGACTTCCTGGCCGGGGCGGTGCGCGTGCCGTCTCCAAGACGCGGTGCG	80
ANT2m	ATGAGAGATGCGCTGTGTCTTCGCCAAGGACTTCCTGGCAGGTGGAGTGGCCGAGCCATCTCCAAGACGCGGTAGC	80
ANT3m	ATGAGGGAACAGGCCATCTCTTCGCCAAAGACTTCTGGCCGAGGCAATCGCCGCGCCATCTCCAAGACGCGGTGCG	80
ANT1m	CCCCATCGAGAGGGTCAAACCTGCTGCTGCAGGTCCAGCATGCCAGCAACAGATCACTGCTGAGAAGCAGTACAAAGGCA	160
ANT2m	GCCCCATCGAGCGGGTCAAGCTGCTGCTGCAGGTCCAGCATGCCAGCAAGCAGATCACTGAGATAAGCAATACAAAGGCA	160
ANT3m	TCCGATCGAGCGGGTCAAGCTGCTGCTGCAGGTCCAGCATGCCAGCAAGCAGATCGCGCGACAAGCAGTACAAAGGCA	160
ANT1m	TCAATGATTTGTGGTGGAAATCCCTAAGGAGCAGGGGTTCTCTCTCTTGAGGGGTAACTGGCCAACGTGATCCGT	240
ANT2m	TTATAGACTGCGTGGTCCGTATCCCAAGGAGCAGGGAGTTCTGTCTCTTGCGGGTAACCTGGCCAATGTCATCAGA	240
ANT3m	TCTGGACTGCATTTGTCGGATCCCCAAGGAGCAGGGCGTCTGTCTCTTGAGGGGTAACCTTGCCAACGTGATTCGC	240
ANT1m	TACTTCCCCACCCAAGCTCTCAACTTCGCCTTCAAGGAAGTACAAGCAGTCTTCTTAGGGGGTGTGGATCGGCATAA	320
ANT2m	TACTTCCCCACCAAGCTCTCAACTTCGCCTTCAAGGATAACAAGCAGATCTTCTGGGTGGTGTGGACAAGAGAAC	320
ANT3m	TACTTCCCCACTCAAGCCTCAACTTCGCCTTCAAGGATAAGTACAAGCAGATCTTCTGGGGGGTGTGGACAAGCAC	320
ANT1m	GCAGTTCTGGCGCTACTTTGCTGGTAACCTGGGTCCGGTGGGGCCGCTGGGGCCACCTCCCTTTGCTTTGTATACCCGC	400
ANT2m	CCAGTTTGGGTCTACTTTGAGGGAACTGGGATCGGGTGGTGGCGAGGGGCCACATCCCTGTGTTTGTGTACCTC	400
ANT3m	GCAGTTCTGGAGTACTTTGCGGGCAACCTGGGCTCCGGTGGTGGCGGGGGGACCTCCCTCTGCTTGTGTACCCGC	400
ANT1m	TGGAATTTGCTAGGACCAAGTTGGTGTCTGATGTGGGCAAGC---GCGCCAGCGTGAGTTCATGGTCTGGGCGACTGT	477
ANT2m	TTGATTTTGCCTTACCCGTCTAGCAGCTGATGTGGGTAAAGGTGGAGGTGAAAGGGAAATCCGAGGCCTGGTGACTGC	480
ANT3m	TGGATTTTGCAGAACCCGCTGGCAGCGGAGTGGGAAAGTCAAGGACAGAGCGGAGTTCGAGGCCTGGGAGACTGC	480
ANT1m	ATCATCAAGATCTCAAGTCTGATGGGTGAGGGGCTTACCAGGGTTTCAACGTCTCTGTCAAGGCATCATATCTA	557
ANT2m	CTGGGTAAAGATCTACAAATCTGATGGGATTAGGGCCTGTACCAAGGCTTTAACGTGTCTGTGCAGGGTATATCATCTA	560
ANT3m	CTGGTGAAGATCAACAGTCCAGCGGCATCGGGGCTGTACCAGGGCTTCAGTGTCTCGTGCAGGGCATCATCTA	560
ANT1m	TAGAGCTGCCTACTTCGGAGTCTATGATACTGCCAAGGGATGCTGCCGTGACCCCAAGAACGTGCACATTTTGTGAGCT	637
ANT2m	CCGAGCGGCTACTTCGGTATCTATGACTGCAAGGGAATGCTTCGGATCCCAAGAACAATCACATCGTCATGAGCT	660
ANT3m	CCGGGCGGCTACTTCGGGTGTACGATACGCCAAGGGATGCTCCCGACCCCAAGAACACGCACATCGTGTGAGCT	640
ANT1m	GGATGATTTGCCAGAGTGTGACGGCAGTGGAGGGGTGTGTCTACCCCTTTGACACTGTTCTGCTAGAAATGATGATG	717
ANT2m	GGATGATCGACAGACTGTCACTGCTGTGCGGGGTGACTTCCTATCCATTTGACACTGTTCCGCGCGCATGATGATG	720
ANT3m	GGATGATCGGACAGACGTGACGGCGTGGCGGGCTGTGTCTACCCCTTGACACGGTGGCGGGCGCATGATGATG	720
ANT1m	CAGTCCGGCCGAAAGGGGCGATATATGTACACGGGACAGTTGACTGCTGGAGGAAGATTGCAAAAGCAAGGAGC	797
ANT2m	CAGTCAAGGGCGAAAGGAATGACATCATGTACACAGGCACGGTTGACTGCTGGCGGAAGATTGCTGCTGATGAAGGAGG	800
ANT3m	CAGTCCGGGCGAAAGGAGCTGACATCATGTACACGGGACCGTTGACTGTTGGAGGAAGATCTTCAAGATGAGGGGGG	800

Fig. 1A

ANT1m	CAAGGCCTTCTTCAAAAGGTGCCTGGTCCAATGTCTGAGAGGCATGGGCGGTGCTTTTGTATTGGTGTGTATGATGAGA	877
ANT2m	CAAAGCTTTTCAAGGGTGCAATGGTCCAATGTCTCAGAGGCATGGGCGGTGCTTTTGTGCTTGTCTTGTATGATGAAA	880
ANT3m	CAAGGCCTTCTTCAAGGGTGCTGGTCCAACGTCCTGGGGGCATGGGGGGCGCTTCGTGCTGGTCCTGTACGACGAGC	880
ANT1m	TCAAAAATATGTCTAA	894
ANT2m	TCAAGAAGTACACATAA	897
ANT3m	TCAAGAAGGTGATCTAA	897

Fig. 1B

hANT1p	MGDHAWSFLKDFLAGAVAAVSKTAVAPIERVKLLLQVQHASKQISAEKQ	50
hANT2p	MTDAAVSFAKDFLAGGVAAATSKTAVAPIERVKLLLQVQHASKQITADKQ	50
hANT3p	MTEQAISFAKDFLAGGIAAATSKTAVAPIERVKLLLQVQHASKQIAADKQ	50
hANT1p	YKGIIDCVVRIPKEQGLSFWRGNLNVIRYFPTQALNFAFKDKYKQIFL	100
hANT2p	YKGIIDCVVRIPKEQGLSFWRGNLNVIRYFPTQALNFAFKDKYKQIFL	100
hANT3p	YKGIIDCVVRIPKEQGLSFWRGNLNVIRYFPTQALNFAFKDKYKQIFL	100
hANT1p	GGVDRHKQFWRYFAGNLASGGAAGATSLCFVYPLDFARTRLAADVGRRA	149
hANT2p	GGVDKRTQFWRYFAGNLASGGAAGATSLCFVYPLDFARTRLAADVKGAGA	150
hANT3p	GGVDKHTQFWRYFAGNLASGGAAGATSLCFVYPLDFARTRLAADVKGSGT	150
hANT1p	QREFHGLGDCIKIKFSDGIRGLYQGFNVSVQGIITYRAAYFGVYDTAKG	199
hANT2p	EREFRGLGDCIKIKFSDGIRGLYQGFNVSVQGIITYRAAYFGVYDTAKG	200
hANT3p	EREFRGLGDCIKIKFSDGIRGLYQGFNVSVQGIITYRAAYFGVYDTAKG	200
hANT1p	MLPDPKNVHIFVSWMIAQSVTAVAGLISYPFDTVRRRMMQSGRKGADIM	249
hANT2p	MLPDPKNTHIVISWMIAQTVTAVAGLISYPFDTVRRRMMQSGRKGADIM	250
hANT3p	MLPDPKNTHIVVSWMIAQTVTAVAGVVSYPFDTVRRRMMQSGRKGADIM	250
hANT1p	YTGTVDCWRKIAKDEGKAFFKGAWSNVLRGMGGAFVLVLYDEIKKYV	298
hANT2p	YTGTDCWRKIARDEGGKAFFKGAWSNVLRGMGGAFVLVLYDEIKKYT	299
hANT3p	YTGTVDCWRKIFRDEGGKAFFKGAWSNVLRGMGGAFVLVLYDEIKKYI	299

Fig. 2

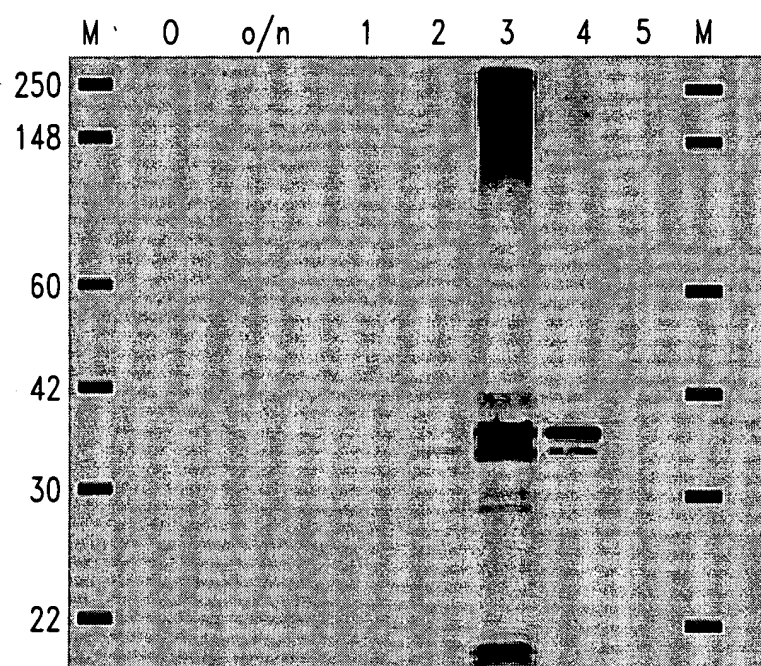


Fig. 3

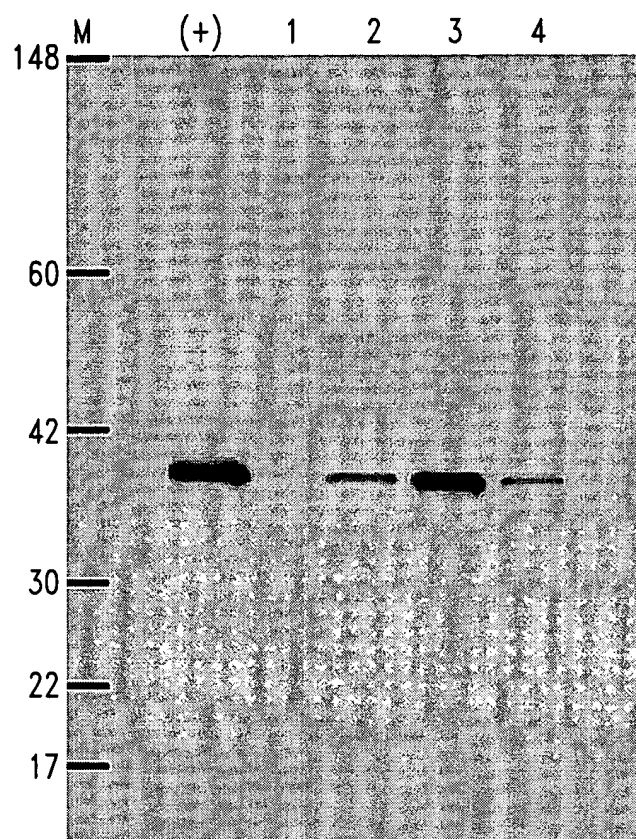


Fig. 4

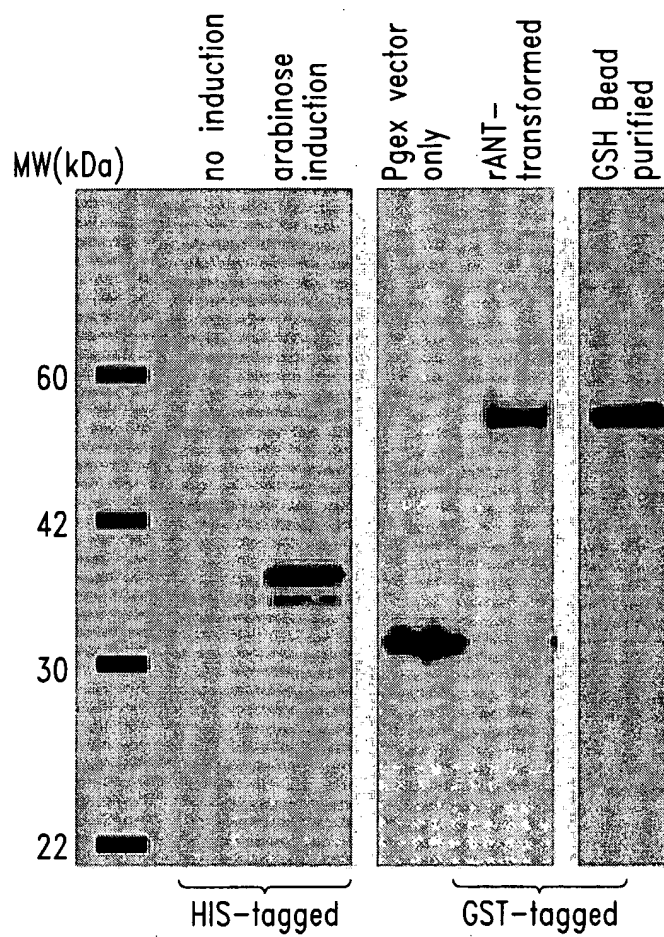


Fig. 5

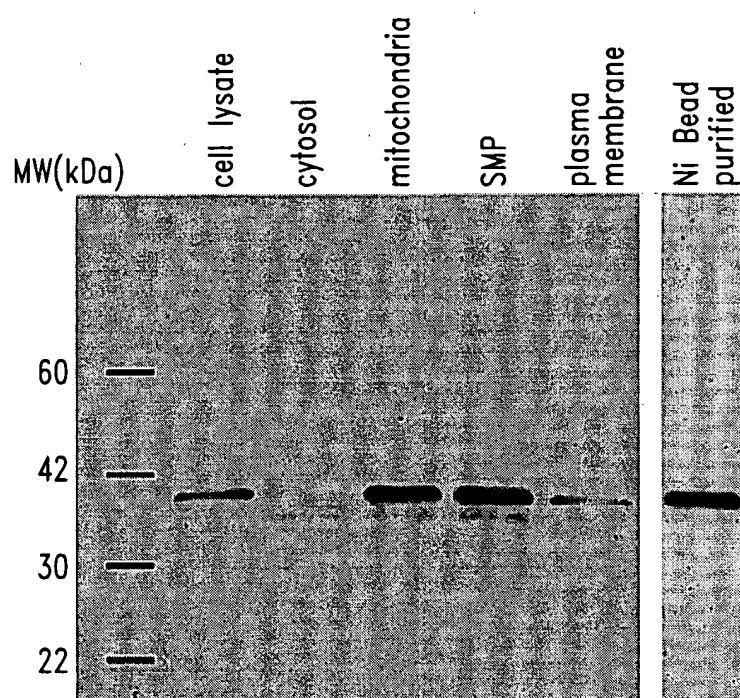


Fig. 6

ATGGTCAACCCACCGTGTCTTCGACATTGCCGTCGACGGCGAGCCCTTGGGCCGCTCTCCTTTGAGC 70
TACCAGTTGGGGTGGCACAAGAAGCTGTAACGGCAGCTGCCGCTCGGGAACCCGGCGCAGAGGAACTCG
M V N P T V F F D I A V D G E P L G R V S F E

TGTTTGCAGACAAGGTCCCAAAGACAGCAGAAAAATTTTCGTGCTCTGAGCACTGGAGAGAAAGGATTTGG 140
ACAAACGTCTGTTCCAGGGTTTCTGTCGTCTTTTAAAAGCAGGAGACTCGTGACCTCTCTTTCCTAAACC
L F A D K V P K T A E N F R A L S T G E K G F G

TTATAAGGGTTCCTGCTTTACAGAATTATTCAGGGTTTATGTGTCAGGGTGGTGACTTCACACGCCAT 210
AATATTCCAAGGACGAAAGTGTCTTAATAAGGTCCCAAATACACAGTCCCACCACTGAAGTGTGCGGTA
Y K G S C F H R I I P G F M C Q G G D F T R H

AATGGCACTGGTGGCAAGTCCATCTATGGGGAGAAATTTGAAGATGAGAACTTCATCCTAAAGCATACGG 280
TTACCGTGACCACCGTTTCAGGTAGATACCCCTCTTTAACTTCTACTCTTGAAGTAGGATTTTCGTATGCC
N G T G G K S I Y G E K F E D E N F I L K H T

GTCCTGGCATCTTGTCCATGGCAAATGCTGGACCCAACACAAATGGTTCACAGTTTTTCATCTGCACTGC 350
CAGGACCGTAGAACAGGTACCGTTTACGACCTGGGTTGTGTTTACCAAGGGTCAAAAAGTAGACGTGACG
G P G I L S M A N A G P N T N G S Q F F I C T A

CAAGACTGAGTGGTTGGATGGCAAGCATGTGGTGTGGCAAAGTGAAAGAAGGCATGAATATTGTGGAG 420
GTTCTGACTCACCAACCTACCGTTTCGTACACCACAAACCGTTTCACCTTCTTCCGTACTTATAACACCTC
K T E W L D G K H V V F G K V K E G M N I V E

GCCATGGAGCGCTTTGGGTCCAGGAATGGCAAGACCAGCAAGAAGATCACCATTGCTGACTGTGGACAAC 490
CGGTACCTCGCGAAACCCAGGTCTTACCGTTCTGGTCGTTCTTCTAGTGGTAACGACTGACACCTGTTG
A M E R F G S R N G K T S K K I T I A D C G Q
TCGAATAA 498
AGCTTATT
L E .

Fig. 7

ATGGTCAACCCACCGTGTCTTCGACATTGCCGTCGACGGCGAGCCCTTGGGCCGCGTCTCCTTTGAGC 70
TACCAGTTGGGGTGGCACAAGAAGCTGTAACGGCAGCTGCCGCTCGGGAACCCGGCGCAGAGGAAACTCG
M V N P T V F F D I A V D G E P L G R V S F E

TGTTTGCAGACAAGGTCCCAAAGACAGCAGAAAATTTTCGTGCTCTGAGCACTGGAGAGAAAGGATTTGG 140
ACAAACGTCTGTTCCAGGGTTTCTGTCGTCTTTTAAAAGCACGAGACTCGTGACCTCTCTTTCCTAAACC
L F A D K V P K T A E N F R A L S T G E K G F G

TTATAAGGGTTCCTGCTTTCACAGAATTATTCAGGGTTTATGTGTCAGGGTGGTGA CTTCACACGCCAT 210
AATATTCCCAAGGACGAAAGTGTCTTAATAAGGTCCCAAATACACAGTCCCACCACTGAAGTGTGCGGTA
Y K G S C F H R I I P G F M C Q G G D F T R H

AATGGCACTGGTGGCAAGTCCATCTATGGGGAGAAATTTGAAGATGAGAACTTCATCCTAAAGCATACGG 280
TTACCGTAGACCACCGTTACGGTAGATACCCCTCTTTAAACTTCTACTCTTGAAGTAGGATTTTCGTATGCC
N G T G G K S I Y G E K F E D E N F I L K H T

GTCCTGGCATCTTGTCCATGGCAAATGCTGGACCCAACACAAATGGTTCACAGTTTTTCATCTGCACTGC 350
CAGGACCGTAGAACAGGTACCGTTTACGACCTGGGTTGTGTTTACCAAGGGTCAAAAAGTAGACGTGACG
G P G I L S M A N A G P N T N G S Q F F I C T A

CAAGACTGAGTGGTTGGATGGCAAGCATGTGGTGTGGCAAAGTGAAAGAAGGCATGAATATTGTGGAG 420
GTTCTGACTACCAACCTACCGTTCTGACACCACAAACCGTTTCACCTTCTTCCGTACTTATAACACCTC
K T E W L D G K H V V F G K V K E G M N I V E

GCCATGGAGCGCTTTGGGTCCAGGAATGGCAAGACCAGCAAGAAGATCACCATTGCTGACTGTGGACAAC 490
CGGTACCTCGCAAACCCAGGTCTTACCGTTCTGGTCGTTCTTCTAGTGGTAACGACTGACACCTGTTG
A M E R F G S R N G K T S K K I T I A D C G Q
TCGAATAA 498
AGCTTATT
L E .

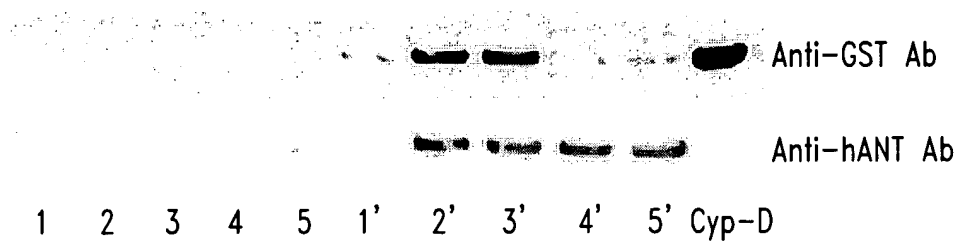


Fig. 9

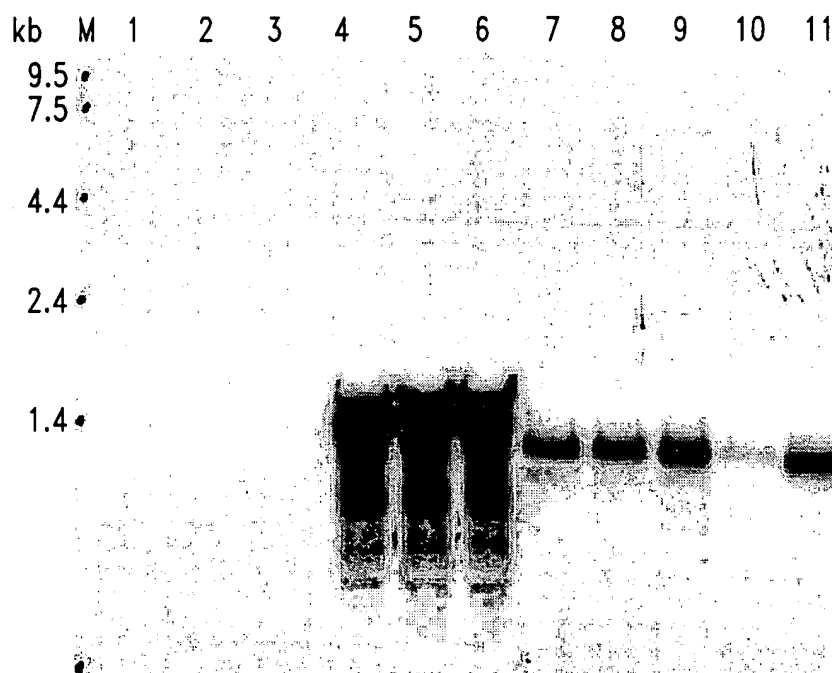


Fig. 10

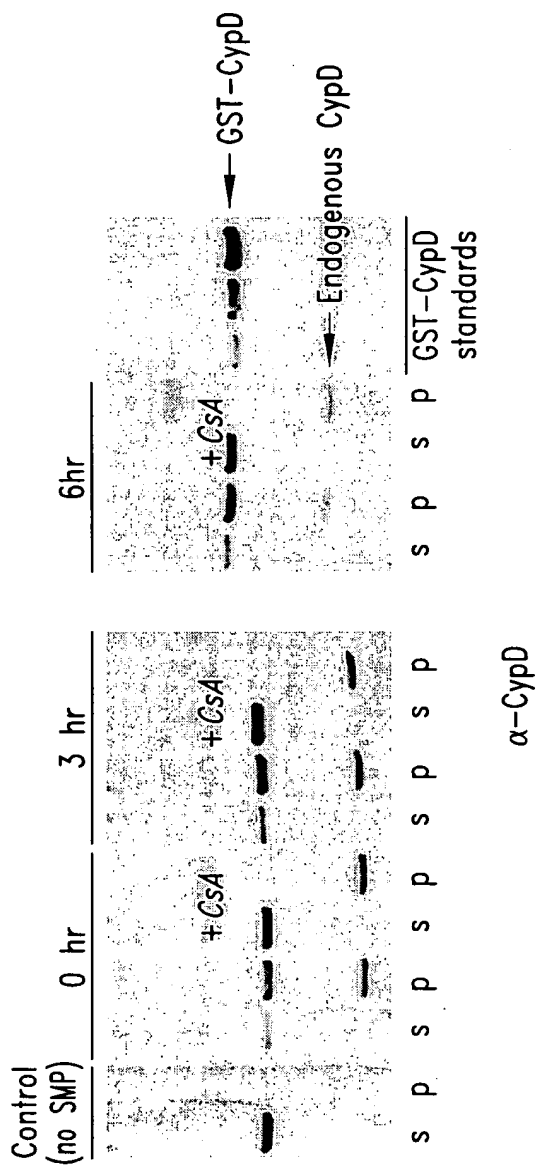


Fig. 11

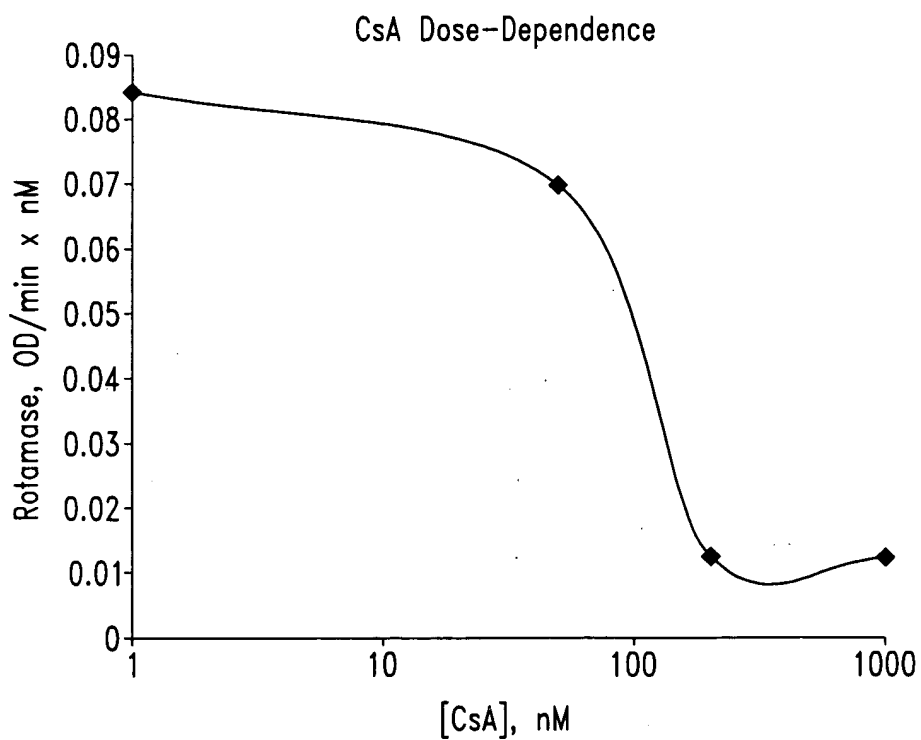
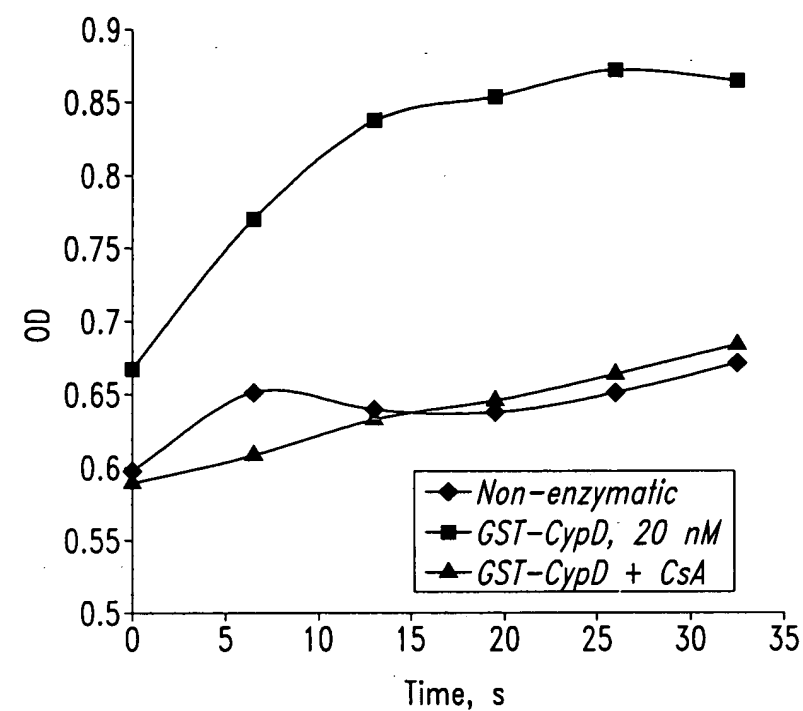


Fig. 12

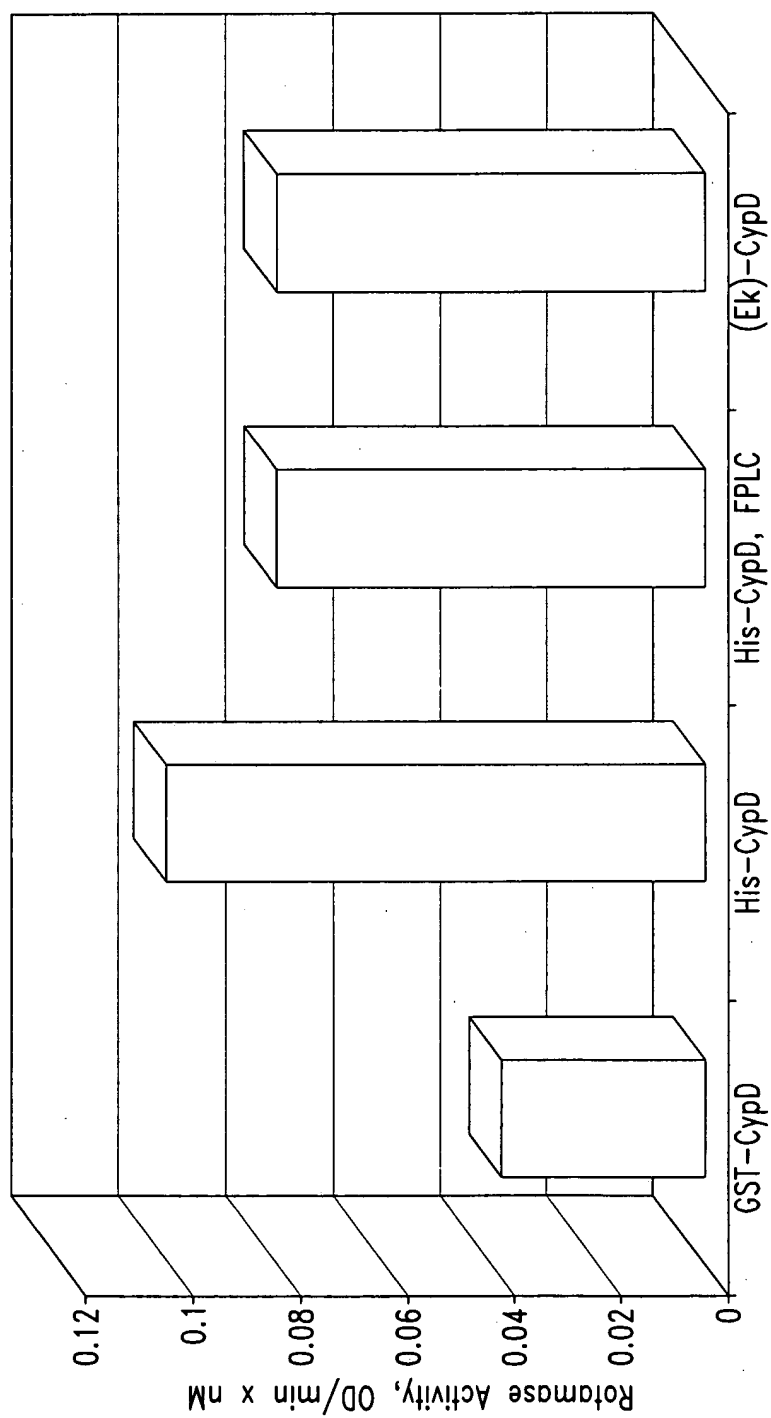


Fig. 13

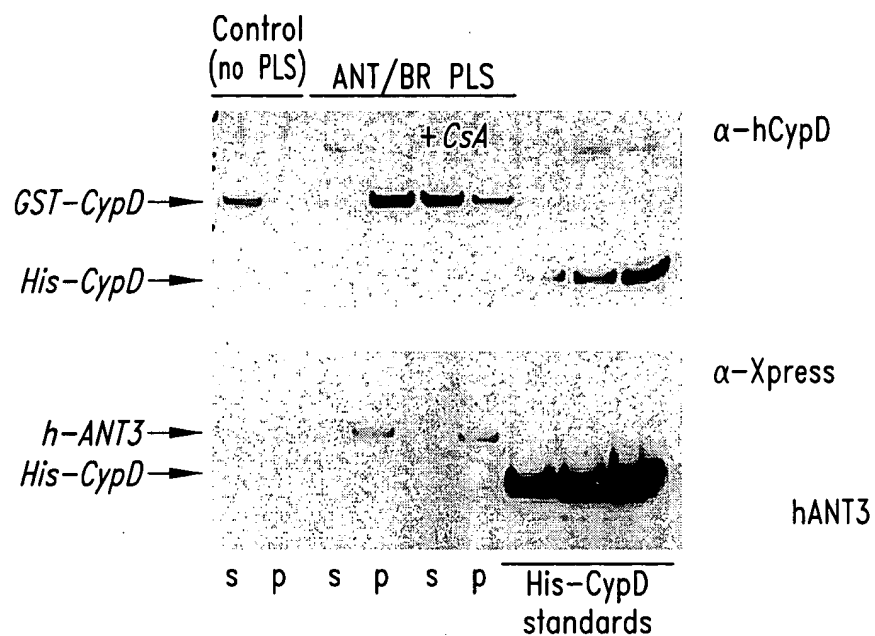


Fig. 14

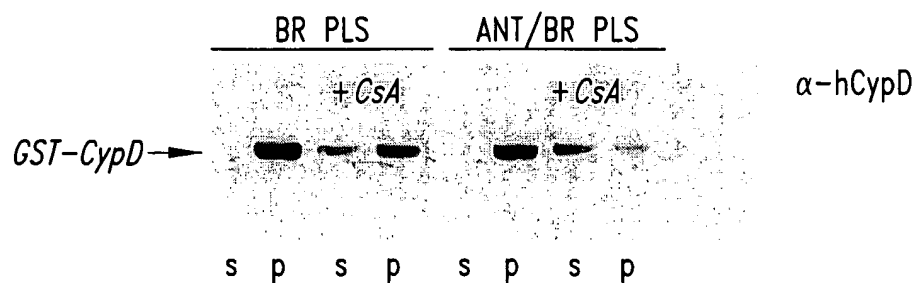


Fig. 15